

AMENDMENTS TO THE DRAWINGS

The attached two sheets of drawings, which include FIG 3 and FIG 4, respectively, replace the original sheets including FIG 3 and FIG 4, respectively.

Attachment: Replacement sheets.

REMARKS

In an Office Action mailed January 6, 2006, the Examiner objected to the Specification, the Drawings and claims 11-16. In addition, the Examiner rejected claims 11-16 under various statutory sections. For one, claims 11-16 were rejected under 35 U.S.C. § 101 for lacking a specific asserted utility or a well established utility. Next, claims 11-16 were rejected under 35 U.S.C. § 112, first paragraph for failing to meet the enablement requirement. Claims 11, 12, 14, and 15 were also rejected under 35 U.S.C. § 112, first paragraph for failing to meet the written description requirement. Finally, claims 11, 12, 14, and 15 were rejected under 35 U.S.C. § 102(e) as being anticipated by Patturajan et al. (US Patent Application Publication No. 2004/0029790).

Applicants respond to each of the Examiner's objections and rejections below. In view of the amendments noted above and the arguments presented herein, applicants respectfully request reconsideration of the merits of this application.

Objection to the Specification

The Examiner alleged that paragraphs [00027], [00050] and [00051] contain hyperlinks. In response, applicants amend paragraphs [00027], [00050] and [00051] to replace the hyperlinks with citation to the source that provides the website referenced in the respective paragraphs. Therefore, applicants respectfully request reconsideration of this objection as applied to the Specification.

Objection to the Drawings

The Examiner alleged that FIG 3 and FIG 4 are impossible to interpret. In response, applicants submit replacement drawings for FIG 3 and FIG 4. Applicants, however, note that no new matter is included in the replacement drawings.

As provided in the application, FIG 3 shows that *CRG-L2* mRNA is essentially undetectable in the normal liver samples but can be detected in all five hepatocellular carcinoma samples (middle panel). Applicants respectfully note that replacement FIG 3 (middle panel) clearly shows a band in all hepatocellular carcinoma lanes (lanes HCC1 and HCC3-6) but not in normal liver tissue lanes (lanes Normal 1 and 2).

Also as provided in the application, FIG 4 shows that *CRG-L2* is primarily expressed in the mouse testis with moderate expression in skeletal muscle (Fig. 4a) and in human tissues *CRG-L2* was expressed primarily in the placenta (Fig. 4b). Applicants respectfully note that replacement FIG 4 clearly shows a band in panel A (34 cycles) in the lanes for testis and skeleton muscle and a band in panel B (either 30 cycles or 32 cycles) in placenta lane.

Applicants respectfully request reconsideration of this objection as applied to the Drawings.

Objection to the Claims

The Examiner alleged that claims 11-16 depend from withdrawn claims and contain non-elected subject matter. Claims 11, 12, 14, and 15 have been amended so that they do not depend on withdrawn or canceled claims and claims 13 and 16 have been canceled. In addition, claims 11, 12, 14, and 15 as amended do not recite non-elected SEQ ID NO:2. Therefore, the applicants respectfully request reconsideration of this objection.

Rejections Under 35 U.S.C. § 101

The Examiner alleged that claims 11-16 are not supported by either a specific asserted utility or a well established utility. In particular, the Examiner cited several articles and book sections to assert that the protein expression level may not correlate with the mRNA level. Without agreeing to the rejection, claims 13 and 16 are canceled and claims 11, 12, 14, and 15 are amended to facilitate prosecution. Amended claims 11, 12, 14, and 15 are limited to an isolated polypeptide comprising or consisting of SEQ ID NO:4 or amino acids 22-400 of SEQ ID NO:4. Applicants reserve the right to pursue the canceled subject matter in a subsequent application.

To support specific utility of the polypeptide defined by SEQ ID NO:4, applicants submit a 37 CFR §1.132 declaration by inventor Dr. Peggy J. Farnham. As the experimental evidence provided in the declaration shows, the polypeptide defined by SEQ ID NO:4 expressed at a much higher level in terms of the amount of the polypeptide in the liver tumor tissues in comparison to the corresponding normal liver tissues. In view of the declaration and the experimental evidence presented therein, applicants respectfully submit that claims 11, 12, 14, and 15 as amended satisfy the utility requirement.

Enablement rejection Under 35 U.S.C. § 112, first paragraph

The Examiner refers to the utility rejection discussed above to allege that claims 11-16 fail to comply with the enablement requirement in that they are not supported by either a specific asserted utility or a well established utility. Applicants refer to the remarks presented above and the declaration attached to respectfully submit that the enablement requirement is satisfied for claims 11, 12, 14, and 15 as amended.

Written description rejection Under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 11, 12, 14, and 15 for failing to satisfy the written description requirement to the extent that they recite polypeptides having at least 68% or 70% sequence identity to a disclosed sequence which read on allelic variants of SEQ ID NO:4. Although not agreeing with the rejection, applicants have amended claims 11, 12, 14, and 15 to facilitate prosecution. Amended claims 11, 12, 14, and 15 are now limited to an isolated polypeptide comprising or consisting of SEQ ID NO:4 or amino acids 22-400 of SEQ ID NO:4. As acknowledged by the Examiner that isolated polypeptides comprising the amino acid sequence of SEQ ID NO:4 meet the written description requirement, applicants respectfully submit that claims 11, 12, 14, and 15 as amended meet the written description requirement.

Rejections Under 35 U.S.C. § 102(e)

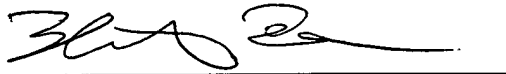
The Examiner alleged that Patturajan et al. anticipates claims 11, 12, 14, and 15 alleging that the reference disclosed a polypeptide that shares 85% identity to SEQ ID NO:4. Claims 13 and 16 are canceled and claims 11, 12, 14, and 15 have been amended to recite an isolated polypeptide comprising or consisting of SEQ ID NO:4 or amino acids 22-400 of SEQ ID NO:4. Applicants believe that the rejection is now moot in view of the above amendments. Therefore, applicants respectfully request reconsideration of this rejection.

Fees

No fee is believed due in connection with this submission. However, if a fee is due in this or any subsequent response, please charge the fee to Deposit Account No. 17-0055.

Likewise, no extension of time is believed due, but should any extension be required in this or any subsequent response, please consider this to be a petition for the appropriate extension of time and a request to charge the petition fee due to the same Deposit Account.

Respectfully submitted,



Zhibin Ren
Reg. No. 47,897
Attorney for Applicants
QUARLES & BRADY LLP
411 East Wisconsin Avenue
Milwaukee, WI 53202

TEL (414) 277-5633
FAX (414) 978-8663
QBMAD\412668.3